

# Simio Licensing

## On-Premises Network Licenses with Reprise License Manager

This document provides information about Simio LLC's network licensing provided by Reprise Software, where licenses are stored on a network machine, which can be accessed by other machines on the same network. A compelling benefit of network licensing is the sharing of licenses among machines, whereas node-locked licenses are fixed to a specific machine.

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## Technical Overview

### On-Premises/Network Licenses

Simio LLC uses Reprise Software for network licensing, where a network machine (“server”) hosts licenses, which can be used by other network machines (“client”) when they can access the server machine. In usual configurations, the client machines are on the same local network as the server, or a VPN is used to connect to the network when physically away from the network location. Another popular way to describe this licensing paradigm is with the phrase “on-premises,” where premises means a physical location, e.g., an office building, and the licenses are hosted therein/on.

In the case of Simio, the software licenses allow its users to access features or avoid limits that are otherwise restricted or imposed. In a network-license configuration, these licenses are installed on the server. The server does not necessarily run the Simio software (“Simio”), but in some special use cases, the server and client may be one and the same.

It is recommended to employ a server that is readily available on the network (i.e., powered on and connectable); otherwise, service will be disrupted for users who want to access the licenses when the server is unavailable.

### Reprise Software and Reprise License Manager

Reprise Software’s (“Reprise”) Reprise License Manager (“RLM”) solution is installed as a Windows Service on the server. RLM is designed as a multi-vendor solution, where many different vendors could use the same installed instance to serve licenses to clients. Reprise refers to these vendors as independent software vendors (“ISV”). As an ISV, Simio LLC has packaged a specific version of RLM to expedite the installation and use thereof.

If an instance of RLM is already installed on your desired server, it is possible to use that which already exists to host your Simio licenses. It is also possible to have multiple instances of RLM installed on the same machine, but complications could arise therefrom. RLM uses TCP/IP and, by default, communicates over ports 5053 and 5054. In addition, there is an ISV-specific port for each vendor. When multiple instances of RLM are installed on the same machine, competition for the same ports may cause the instance that cannot attain the port(s) to terminate. [See Miscellaneous + Troubleshooting for more information.](#)

If a version of RLM other than that which Simio LLC has supplied is used, the `simio.set` file will be required in the same directory as the executable. [See Miscellaneous + Troubleshooting for more information.](#)

The Simio-supplied RLM installer creates a Windows Service called `RLM Simio`, with default installation at `C:\Program Files (x86)\Simio LLC\Simio Network License Server` for the executable and supporting files, and a working directory at `C:\ProgramData\Simio LLC\Simio Network Licensing`. This service must be running for successful use of the license server; if the service is not running, the license server is not running.

Port 5053 is used as the handshake port between the server and the client to establish a connection to the service. Then, the ISV-specific port is used to serve the license(s). Port 5054 is used for the web-based administration interface (“web administration app”), which is available on the server or from another machine that can access the server.

This document assumes the default installation of the Simio-supplied RLM.

## License Key Activation and Licenses

Simply, Simio LLC provides its users with activation or license keys, which are claim codes for an actual license. These activation keys are used to generate a license file, which is then installed on the server. Each key has a specified number of seats (i.e., simultaneous users of the license), and seats of the same key can be activated on different servers if desired.



**ATTENTION:** The combination of a license key, server (i.e., hostid), and seat count must be unique. For example, given a four-seat key, it is not possible to add two seats from the key to a server, then, later, add the other two seats to the same server.

There are a few different styles of licenses. A license may be valid for a specific duration, after which the license is ineffective, and may be called a subscription or fixed-term license. Usually, any future available software from the license key delivery can be used with a subscription license during its period of validity.

A license that is good in perpetuity (i.e., forever) is called a perpetual license. Usually, perpetual licenses have a period of maintenance, which expires, and during which, future available software from the license key delivery can be used. The latest version of software that can be used with a perpetual license is either (a) the software that was released near the time of license key delivery when no maintenance is applied or (b) the software released through the period of active maintenance. Customers of perpetual licenses usually renew their maintenance plan so that current software can be used. Initial maintenance functionality is usually provided with the perpetual license and with a new license key/file for renewals.

When a subscription or fixed-term license is renewed (e.g., after expiration), the license key may be adjusted so an updated license can be generated, which will increase the period of validity; or, a new license key may be delivered to replace the expired key/license. A maintenance license, although serving a different purpose, operates similarly to a subscription license. When a maintenance license is renewed (e.g., after expiration), the license key may be adjusted so an updated license can be generated, which will increase the period of validity; or, a new license key may be delivered to replace the expired maintenance key/license. Maintenance keys/licenses offer no functionality without a perpetual key/license.

Generally, adding a license to the server increases the number of simultaneous licensed users by the number of license seats, except for Simio for OptQuest, which is an add-on for an already licensed user, and maintenance keys/license, which require a perpetual license.

## Server Requirements

The installer provided by Simio is for a Windows-based (Windows and Windows Server) machine. Virtual machines are acceptable but may require an additional license ([See Miscellaneous + Troubleshooting for more information.](#)) Other requirements and considerations are below.

- Available on the organization network, which is also accessible by the client machines using Simio.
- Available when clients wish to use a hosted license.
- The computation load imposed by the service is low.
- It is possible to host licenses from other vendors using the Simio service.
- Installation will require administrative privileges.
- If the network environment has a firewall, TCP ports will need to be opened. The installation automatically opens ports 5053 and 5054, but the Simio ISV port will need to be set to a static port and manually opened in the firewall. ([See Installation > Special Installation and Configuration > Specifying Ports for more information.](#))



**IMPORTANT:** Old/current client software is expected to be operable with the new (v15.1) license server; however, Simio 15.254 and newer require RLM v15.1.

## Web Administration App

Administration of the license server is available on port 5054 of the server machine (<http://localhost:5054/>). Using this interface, licenses will be activated, usage information can be observed, and options can be established such that licenses are available to specific users/groups. This document describes how to use the interface after the license server has been installed.

## Installation

Installing the license server, as supplied by Simio LLC, is easy. The appropriate directories and Window Service will be created using the MSI file. Below, in Table 1, you will see the items resulting from using the MSI.

If your environment or policies require, or if a customization is desired, which requires a declaration at installation, the Windows Service can be installed manually. If so desired, it is recommended to install the Simio-supplied installer first to attain the `simio.set` file and better understand the license server. Refer to the RLM License Administration manual available from the web administration app (click RLM Manual... button from the left-side menu) for more information.

**Table 1** SimioNetworkLicenseServerInstall Results

Item	Description
C:\Program Files (x86)\Simio LLC\Simio Network License Server	The directory for the executables, ISV setting, supporting files, user provisioning, RLM diagnostic file
C:\ProgramData\Simio LLC\Simio Network Licensing	The working directory, includes license files, logs, ISV Option file
RLM Simio	The Windows Service
Simio RLM License Server, Inbound Firewall Exception	TCP 5053
Simio RLM License Server Web Server, Inbound Firewall Exception	TCP 5054
HKEY_CURRENT_USER\SOFTWARE\Simio\Simio\SNLSCS	Supports Start Apps Shortcut

The contents provided in the `SimioRLM15_1-v1-20230720.zip` are described in Table 2, below. If there is an existing installation of RLM Simio/Simio Network License Server Configuration (“Simio license server”), please refer to 02 README Updating from Previous Version for an overview of changes and how to upgrade the current installation.

**Table 2** SimioRLM15\_1-v1-20230720 Contents

Item	Description
01 Simio Reprise RLM Network Licensing Manual	This document
02 README Updating from Previous Version	A brief for those who are updating from a previous version of RLM, e.g., v9.4, v11.2
SimioNetworkLicenseServerInstall-15.0.33055.msi	Simio-specific RLM installer

## Installing Simio License Server

### → When Updating an Existing Installation

If there is an existing installation, before updating the Simio license server, preserve the license and Options files first. From C:\ProgramData\Simio LLC\Simio Network Licensing, create a copy of any files ending in \*.lic and \*.opt and place them in a secure location, e.g., a folder on the Desktop. If another vendor's application is licensed from the Simio license server, confirm that their software is compatible with RLM v15.1, and preserve any supporting files (e.g., license files, set files, etc.).

To install the Simio license server, run SimioNetworkLicenseServerInstall-15.0.33055.msi on the destination server machine and follow the prompts. This document assumes default installation. When the installation finishes, the web administration app will appear.

Next, set a new password for the default account for the license server by visiting the web administration app (<http://localhost:5054/>) and logging in with the default username and password. The default Username and Password = 'admin'. The password must be changed from the default value ('admin') within the first 10 minutes of the installation, or after subsequent starts, by clicking the Change Password button from the left-side menu.

The rlm.pw file located at C:\Program Files (x86)\Simio LLC\Simio Network License Server includes default provisions for a named user for the web administration app. The file defines Username and Password = 'admin', with all permissions. [See Special Installation and Configuration > Custom RLM Web Administration App Users and Permissions for more information.](#) A password for the user must be set immediately after RLM Simio is started/installed; otherwise, the service may terminate.

Consider logging out of the account and logging back in to ensure the set password works as expected.



**IMPORTANT:** Setting the password is a crucial step; otherwise, the license server will be inoperable after 10 minutes. Simio LLC cannot provide assistance with forgotten passwords, passwords should be documented in a secure location.

## Installing Licenses

### → When Updating an Existing Installation

If files were preserved from an existing installation, review C:\ProgramData\Simio LLC\Simio Network Licensing, and compare those that were preserved with those in the directory. If files in the preserved set do not show in the C:\ProgramData\Simio LLC\Simio Network Licensing, copy them to C:\ProgramData\Simio LLC\Simio Network Licensing. Visit the web administration app, <http://localhost:5054/>, and click Reread/Restart Servers from the left-side menu, then REREAD/RESTART.

After successfully installing the Simio license server, the next step is installing the licenses.



**NOTE:** If a virtual machine is serving as the Simio license server, a special license may be required. If you have trouble using a virtual machine as the license server, please send your request for the virtual machine license to [licensing@simio.com](mailto:licensing@simio.com), in reply to your initial license delivery email, stating that a virtualization license is required. Additionally, supply a Diagnostic file (see [Diagnostic File](#)).

The process of installing licenses has two parts: (1) using the activation key to generate a license file and (2) placing the license file in the appropriate directory on the server. Licenses can be activated and installed using the produce described herein. Additionally, a license can be activated remotely, which is how Simio LLC is able to assist in activating licenses on behalf of its users.

When a license is activated, a unique fingerprint of the server machine is used; therefore, once a license is activated, it cannot be moved to another server machine without the assistance of Simio.

An active internet connection is required to activate a license. License activation pings <https://rlmactivation.simio.com>. If the server does not have an internet connection, it is possible to activate the license using a machine that does have access (see [Installing a License via an Internet-Connected Machine](#) for more information).

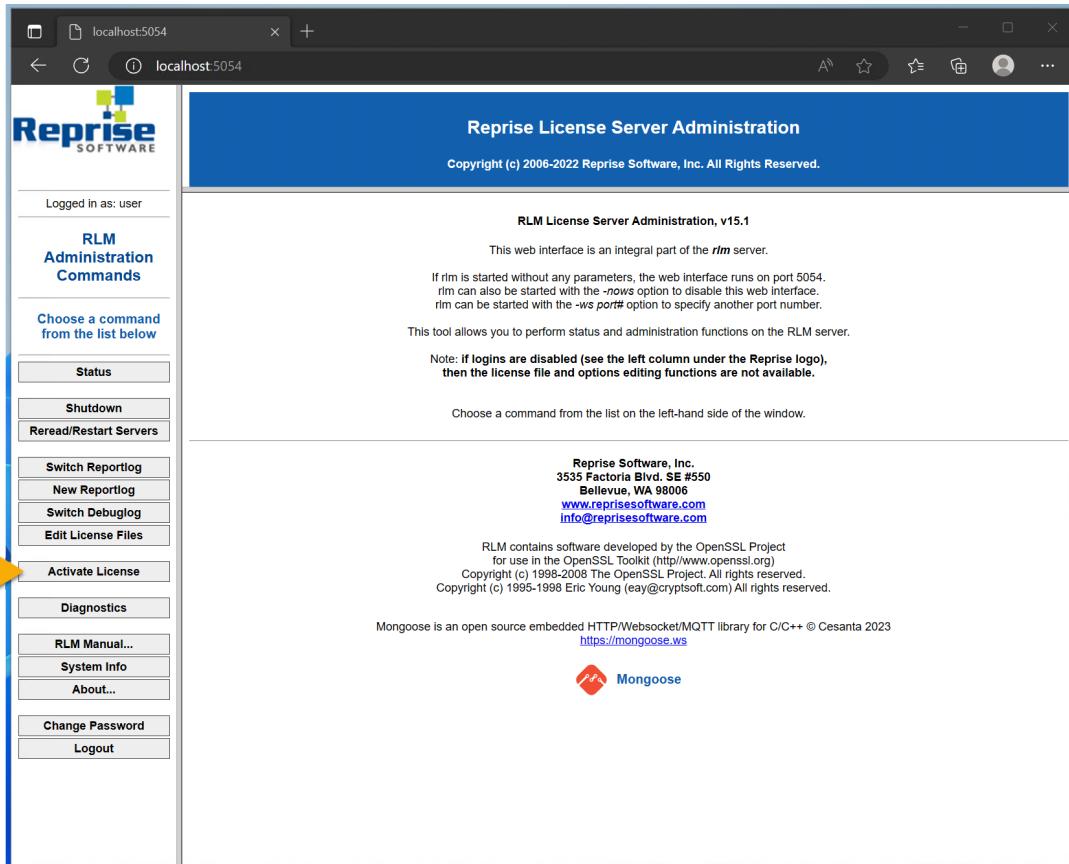
To install a license, visit the web administration app (<http://localhost:5054/>) and locate the desired license key and its number of seats. License keys are in the format of four groups of four integers: xxxx-xxxx-xxxx-xxxx.

Usually, all seats from a key are desired for the server, in which case, the actual number of seats is used to claim all available seats. Still, in some cases, it may be desirable to distribute license seats across different servers. [See Distributing Licenses Across Multiple Servers ★ for more information.](#)

On either the server, or the machine being used for its internet connection, after installing the license server, visit <http://localhost:5054/> and locate the desired license key(s) and its number of seats.

Then, click Activate from the left-side menu (see Image 1, Item A).

**Image 1** Web Administration App Homepage



Next, click BEGIN License Activation (Image 2, Item B).

**Image 2** Begin License Activation

The screenshot shows the 'Reprise License Server Administration' interface. On the left is a vertical menu bar with the following items:

- Logged in as: user
- RLM Administration Commands** (highlighted in blue)
- Choose a command from the list below
- Status
- Shutdown
- Reread/Restart Servers
- Switch Reportlog
  - New Reportlog
  - Switch Debuglog
  - Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

The main content area has a blue header bar with the text "Reprise License Server Administration" and "Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.". Below this is a section titled "License Activation" with the following text:

RLM activates licenses by making a request on the internet to generate a license file for your machine. If you are activating a license, you should run "rlm" on the machine where your license is to be used (either where a nodelocked license is going to be used, or the machine you want to be the license server if it is a floating license). If you are not sure where this copy of "rlm" is running, click on "System Info" from the menu on the left. If rlm is running on the wrong machine, run rlm on the correct machine and do the activation using its web interface.

Note that not all application vendors support license activation, so please check with your vendor to see if this capability is available to you.

A yellow callout bubble labeled 'B' points to the "BEGIN License Activation" button.

Then, enter rlmactivation.simio.com in ISV activation website (Image 3, Item C) and click Next (Item D).

**Image 3** ISV Activation Website

The screenshot shows the 'Reprise License Server Administration' interface. On the left is a sidebar with a tree view of 'Administration Commands'. The main area is titled 'License Activation (step 1 of 5) - select activation server'. It contains a text input field for the activation website, which has 'rlmactivation.simio.com' typed into it. Below the input field is a 'Next->' button.

Logged in as: user

**RLM Administration Commands**

Choose a command from the list below

- Status
- Shutdown
- Reread/Restart Servers
- Switch Reportlog
- New Reportlog
- Switch Debuglog
- Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

Reprise License Server Administration

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License Activation (step 1 of 5) - select activation server

RLM licenses can be activated from a number of different websites. First, enter the website below, then press "Next".

ISV activation website:

Next-> D

C

In ISV (Image 4, Item E), enter simio and in License activation key (Item F), enter the license key, with hyphens: e.g., xxxx-xxxx-xxxx-xxxx. Click Next.

**Image 4** ISV and License Activation Key

Reprise License Server Administration  
Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.

License Activation (step 2 of 5) - specify license activation key

RLM licenses are activated based on an **activation key** which you received from your software vendor. This **activation key** will specify the product to be activated. Enter your **ISV name** and **activation key** below, then press "Next".

ISV:  License activation key:

**E** **F** **G**

Next-> <-Back

Logged in as: user

**RLM Administration Commands**

Choose a command from the list below

- 
- 
- 
- - 
  -
- 
- 
- 
- 
- 
- 
-



**ATTENTION:** If the machine by which the license is being generated is the server, no special attention is needed. If the machine by which the license is being generated is *not* the server (e.g., another machine is being used for its internet connection), the value in License Server or Node-locked hostid needs be updated to that of the server machine. This value can be found from the Diagnostic file of the Server, see [Miscellaneous + Troubleshooting > Diagnostic File for more information](#).

In License Server or Node-locked hostid (Image 5 , Item H) change the value to the server hostid if not activating on the license server, otherwise keep the value. In License count (for floating licenses) (Item I), enter the number of seats to claim for the license key. For a virtualization key (i.e., allows use of a virtual machine) the value is '1'. When license keys are delivered, the number of seats associated with the key will be provided. Usually, all seats will be claimed. Click Next (Item J).

### Image 5 License Server and License Count

<div style="background-color: #f0f0f0; padding: 5px;"> Logged in as: user   <b>RLM Administration Commands</b>   Choose a command from the list below   <input type="button" value="Status"/>  <input type="button" value="Shutdown"/>  <input type="button" value="Reread/Restart Servers"/>  <input type="button" value="Switch Reportlog"/>  <input type="button" value="New Reportlog"/>  <input type="button" value="Switch Debuglog"/>  <input type="button" value="Edit License Files"/>  <input type="button" value="Activate License"/>  <input type="button" value="Diagnostics"/>  <input type="button" value="RLM Manual..."/>  <input type="button" value="System Info"/>  <input type="button" value="About..."/>  <input type="button" value="Change Password"/>  <input type="button" value="Logout"/> </div>	<div style="background-color: #003399; color: white; text-align: center; padding: 5px;"> <b>Reprise License Server Administration</b>  Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved. </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <b>License Activation (step 3 of 5) - specify machine for nodelocked license or license server and license count</b>   <small>RLM licenses are locked to a particular computer which is identified by a hostid. This is true for nodelocked licenses (the license itself is locked) and floating licenses (the license server is locked). The hostid of this machine is filled in below - if you want to lock this license (or license server) to this computer, leave the hostid field as-is, otherwise, enter the hostid of the machine you would like to lock the license (server) to. Floating licenses require a count. When you have selected the desired hostid and license count, press "Next".</small> </div> <div style="text-align: center;"> <span style="color: orange; font-size: 2em;">H</span>      License Server or Node-lock hostid: <input type="text" value="00155d561b09"/>  <span style="color: orange; font-size: 2em;">I</span>      License count (for floating licenses): <input type="text" value="1"/>  <span style="color: orange; font-size: 2em;">J</span>      <input type="button" value="Next-&gt;"/> <input type="button" value="&lt;-Back"/> </div>
---	---



**ATTENTION:** The combination of a license key, server (i.e., hostid), and seat count must be unique. For example, given a four-seat key, it is not possible to add two seats from the key to a server, then, later, add the other two seats to the same server.

Keep the value of License File to create or edit (Image 6, Item K) and click Next (Item L). The name of the license file can be later updated to better reflect its contents, should the change be desirable.

**Image 6** License File to Create

**Reprise License Server Administration**

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Logged in as: user

**RLM Administration Commands**

Choose a command from the list below

- [Status](#)
- [Shutdown](#)
- [Reread/Restart Servers](#)
- [Switch Reportlog](#)
- [New Reportlog](#)
- [Switch Debuglog](#)
- [Edit License Files](#)
- [Activate License](#)
- [Diagnostics](#)
- [RLM Manual...](#)
- [System Info](#)
- [About...](#)
- [Change Password](#)
- [Logout](#)

**License Activation (step 4 of 5) - specify license file location**

RLM licenses are stored in a *license file* which needs to be accessed by either the license server (for floating licenses) or the application. By default, we place the license file in the directory where you started this rlm process. When you execute the restart/reread command on the left, the new license file will be read by rlm. However, you can specify a different location for the license file if you wish. When you have selected the desired license file location, press "Next".

K License File to create or edit: 
L

Review the information provided and click REQUEST License (Image 7, Item M).

**Image 7 Request License**

The screenshot shows the 'Reprise License Server Administration' software interface. On the left is a vertical menu bar with the following items:

- Logged in as: user
- RLM Administration Commands** (highlighted in blue)
- Choose a command from the list below
- Status
- Shutdown
- Reread/Restart Servers
- Switch Reportlog
- New Reportlog
- Switch Debuglog
- Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

The main window title is "Reprise License Server Administration" and the copyright notice is "Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved." The central area is titled "License Activation (step 5 of 5) - verify parameters and request license". It contains a message: "You have now entered all the data required for activation. Please verify this is the license you want to generate, and if so, press the \"REQUEST LICENSE\" button below. This will request the license from the internet, and place it in the file specified below. Note that this operation may take up to 15 seconds." Below this is a table titled "Activation Request Data:" with the following entries:

Activation Server	rimactivation.simio.com
ISV	simio
Activation Key	XXXX-XXXX-XXXX-XXXX
Count	1
Hostid	00155d561b09
Hostname	ADM-VM1
License File	C:\ProgramData\Simio LLC\Simio Network Licensing\activate2.ilc

At the bottom right of the main window are three buttons: "REQUEST LICENSE" (highlighted with a yellow arrow and labeled 'M'), "<-Back", and "Cancel".

If the license was successfully generated, a confirmation message will be shown (Image 8), click (Re)Start License Server (Item N).

**Image 8** License Retrieved

The screenshot shows the 'Reprise License Server Administration' interface. On the left is a sidebar with a list of commands:

- Logged in as: user
- RLM Administration Commands** (highlighted in blue)
- Choose a command from the list below
- Status
- Shutdown
- Reread/Rerun Servers
- Switch Reportlog
- New Reportlog
- Switch Debuglog
- Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

The main area displays the message "License Activation - license retrieved" above a series of five horizontal bars. In the bottom right corner, there is a yellow button with a white arrow pointing right and the letter "N" next to it, labeled "(Re)Start License Server".



**GET HELP:** If the license is not generated, make sure all supplied information is correct and an active connection to the internet is available. Simio can also assist in activating a license key and generating a license file, see [Miscellaneous + Troubleshooting > Simio-Assisted License Activation](#).

Click REREAD/RESTART (Image 9, Item O).

**Image 9** Reread/Restart Servers

The screenshot shows the 'Reprise License Server Administration' interface. The left sidebar lists various administration commands. The main panel is titled 'Reread/Restart Servers' and contains a note: 'If /ISV is specified as "all" or blank, all ISV servers will reread licenses'. Below this is a dropdown menu labeled 'ISV: -all-' and a large yellow button labeled 'REREAD/RESTART' with a circled 'O' icon above it.

Logged in as: user

**RLM Administration Commands**

Choose a command from the list below

Status

Shutdown

Reread/Restart Servers

Switch Reportlog

New Reportlog

Switch Debuglog

Edit License Files

Activate License

Diagnostics

RLM Manual...

System Info

About...

Change Password

Logout

**Reprise License Server Administration**

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Reread/Restart Servers

If /ISV is specified as "all" or blank, all ISV servers will reread licenses

ISV: -all-

O REREAD/RESTART

As shown in Image 10, the reread/restart command was successful and activating the license key is complete. The license was generated in C:\ProgramData\Simio LLC\Simio Network Licensing.



**ATTENTION:** If the machine by which the license was generated was not the intended server, the license file created will need to be moved to the server, in the matching directory.

**Image 10** Reread Confirmation

The screenshot shows the 'Reprise License Server Administration' software window. The title bar reads 'Reprise License Server Administration' and 'Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.' The left sidebar, titled 'RLM Administration Commands', lists various options: Status, Shutdown, Reread/Restart Servers (which is selected), Switch Reportlog, New Reportlog, Switch Debuglog, Edit License Files, Activate License, Diagnostics, RLM Manual..., System Info, About..., Change Password, and Logout. The main pane displays the message 'Reread command sent to all servers'.

For each key that should be activated, the above process will be repeated.

## Special Installation and Configuration

Additional customizations can be made for the license server, as desired or required. Some of the options can be changed after a license is installed, but others must be considered when installing a license. Those options that must be specified before installation are marked with a star symbol (★).

### ***Installing a License via an Internet-Connected Machine***

If the desired server machine does not have internet access, the provided installer can be used on a machine which does have access to the internet and used for its internet connection to generate a license file. Then, that license file can be installed on the server by placing it in the correct directory.

When performing such a procedure, it is important that the current hostid is used. The value in License Server or Node-locked hostid (Image 5 , Item H) needs be updated to that of the server machine, which can be attained from a Diagnostic file or the resulting page from clicking the System Info button in the left-side menu of the web administration app. See [Miscellaneous + Troubleshooting > Diagnostic File for more information.](#)

## ***Specifying Ports***

The Simio license server (RLM) uses three TCP/IP ports, 5053, 5054, and a dynamic port for Simio. Port 5054 is used for the web administration app, changing the port must be done with a custom installation of the Windows Service, this change is unusual. Port 5053 is the handshake port which allows for the initial correspondence between the client and server. Sometimes this port is changed, but not often. Finally, the dynamic port (i.e., ISV-specific port) changes every 24 hours; however, in environments with firewalls, it is important to make the ISV port static so firewall exceptions can be made, and the traffic can flow between the server and client.

***Establish ISV Port as Static Value*** Create a file `!SimioConfig.lic` in `C:\ProgramData\Simio LLC\Simio Network Licensing`, ensuring that the file extension is `*.lic`. The contents of the file should be as below.

```
ISV simio port=49152
```

Where 49152 is the desired port number.

In order for the change to affect the service, it will need to be restarted. [See Miscellaneous + Troubleshooting > Restart the RLM Simio Service for more information.](#)

Confirmation that the desired port is used is provided by Status (Image 11, Item A), in the ISV Servers table under port for the simio row (Item B).

**Image 11** Status, Showing Current ISV Port

The screenshot shows the 'Reprise License Server Administration' interface. The left sidebar lists various administration commands. The main area displays the 'Status for "rlm" on ADM-VM1 (port 5053)'.

**Status Information:**

RLM software version	v15.0 (build:1)
RLM comm version	v1.2
debug log file	C:\ProgramData\Simio LLC\Simio Network Licensing\rlm.dlog
license files	C:\ProgramData\Simio LLC\Simio Network Licensing\SimioConfig.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate1.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate2.lic

**Statistics:**

rlm Statistics	Since Start	Since Midnight	Recent
Start time	04/18 23:26:37	04/18 23:26:38	04/18 23:26:38
Messages	0 (0/sec)	0 (0/sec)	0 (0/sec)
Connections	0 (0/sec)	0 (0/sec)	0 (0/sec)

**ISV Servers:**

Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN	ACTIVATE
simio	49152	Yes	0	simio	simio	simio	simio	simio	simio	simio	simio

Buttons at the top right: EDIT rlm Options, SHOW rlm Debug Log.



**ATTENTION:** The Windows Service (RLM Simio) may need to be restarted for the change to be in effect.

**New Firewall Inbound Rule** Next, an inbound firewall rule will need to be made on the server. Go to Windows Defender Firewall with Advanced Security (or similar) (press Windows key and search “firewall”, then select Windows Defender Firewall with Advanced Security).

Create a new Inbound Rule by selecting Inbound Rules from the left-side menu of Windows Defender Firewall with Advanced Security (Image 12).

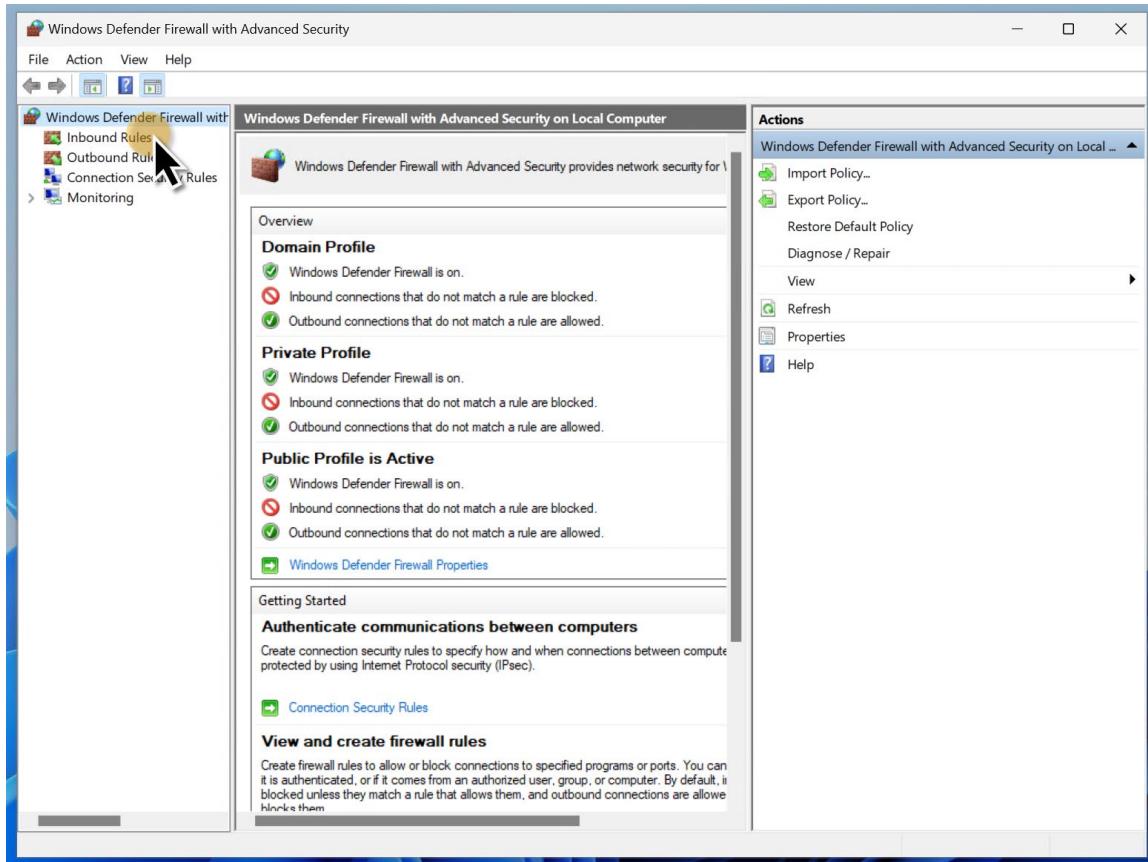


**IMPORTANT:** The information in this section is a recommendation, consult the organization technology and infrastructure group for advice and additional assistance. Simio LLC can only provide limited guidance on this matter.



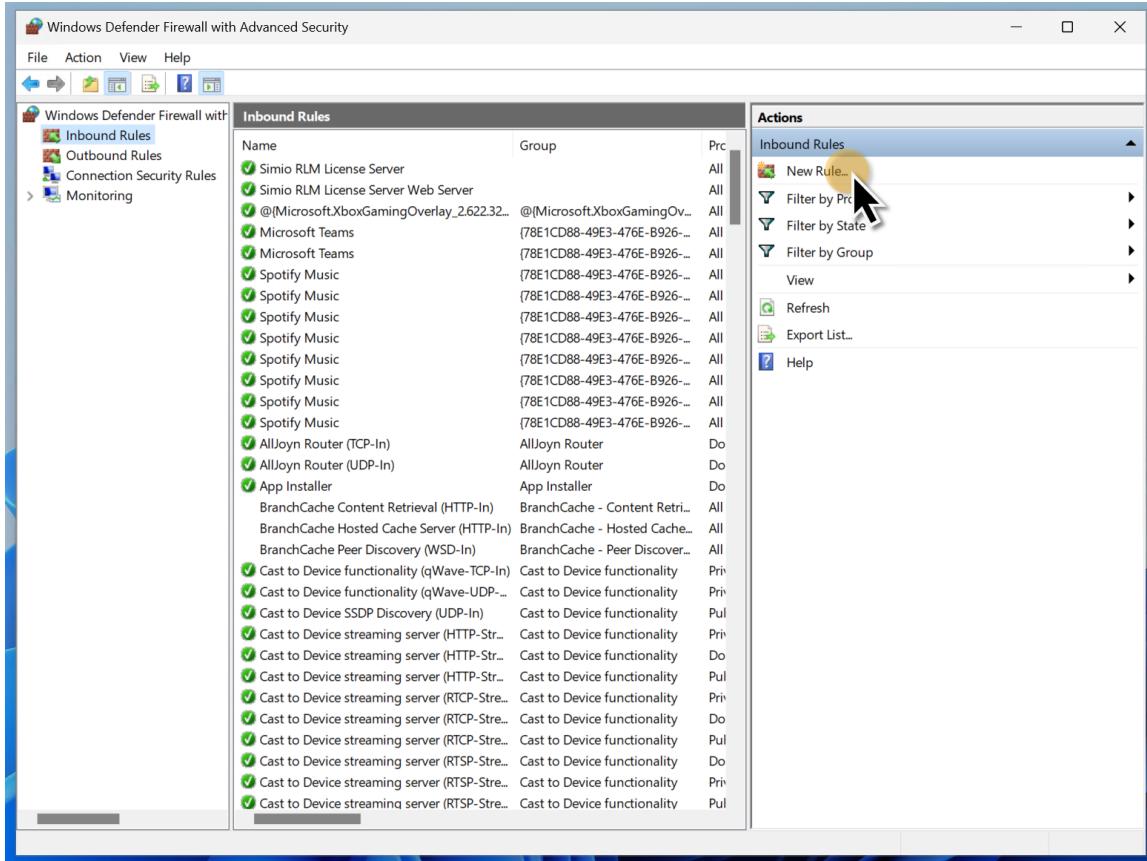
**ATTENTION:** Shared in this section is information about how to open a port in the server machine's firewall by creating an inbound rule; this may be insufficient if the environment has a firewall on the network, on which a rule needs to be created. In such an environment, rules should be created for 5053 and the static-set port.

**Image 12** Windows Defender Firewall with Advanced Security



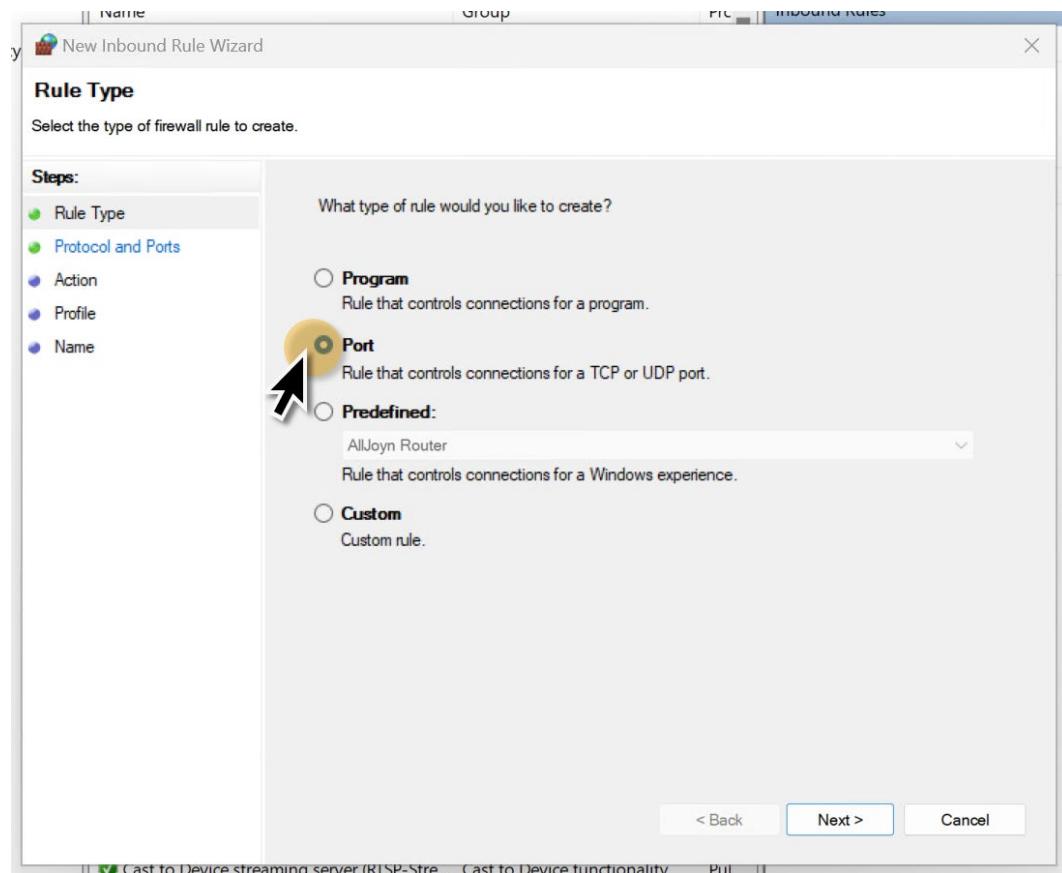
Next, select New Rule... from the right-side menu (Image 13).

**Image 13** Inbound Rules



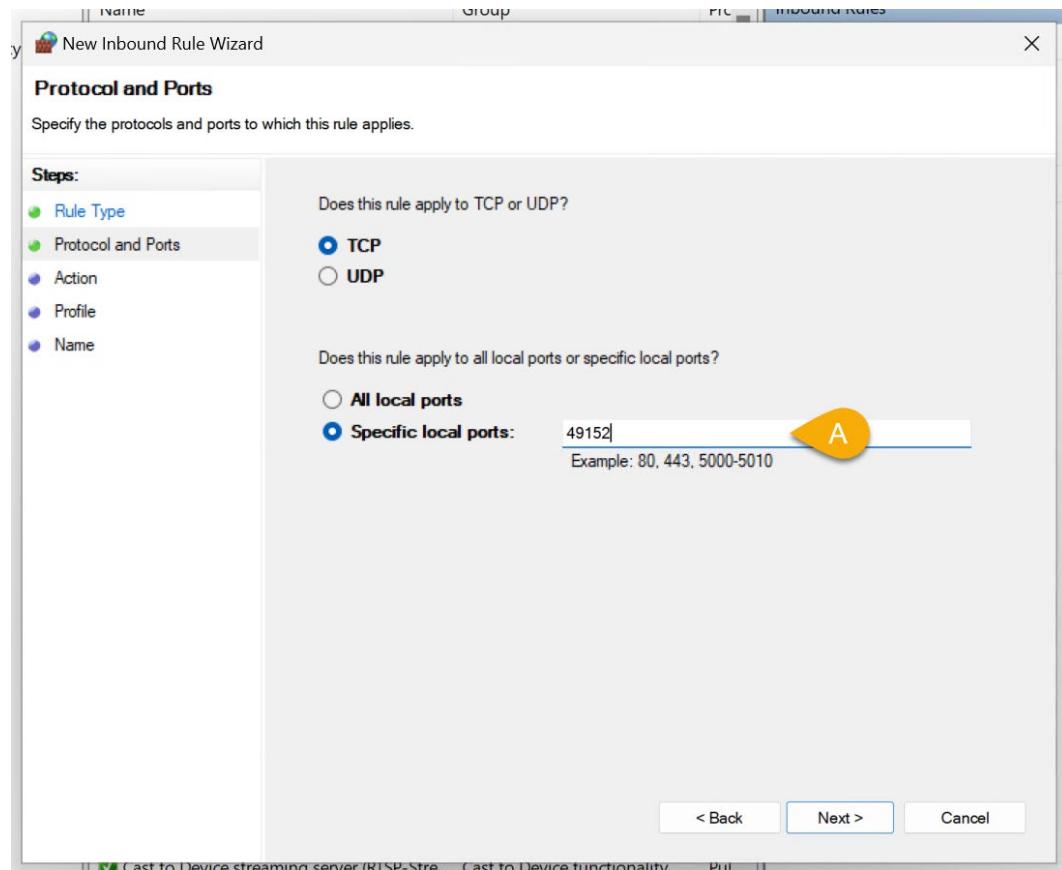
Select Port, then click Next (Image 14).

**Image 14** New Inbound Rule, Rule Type



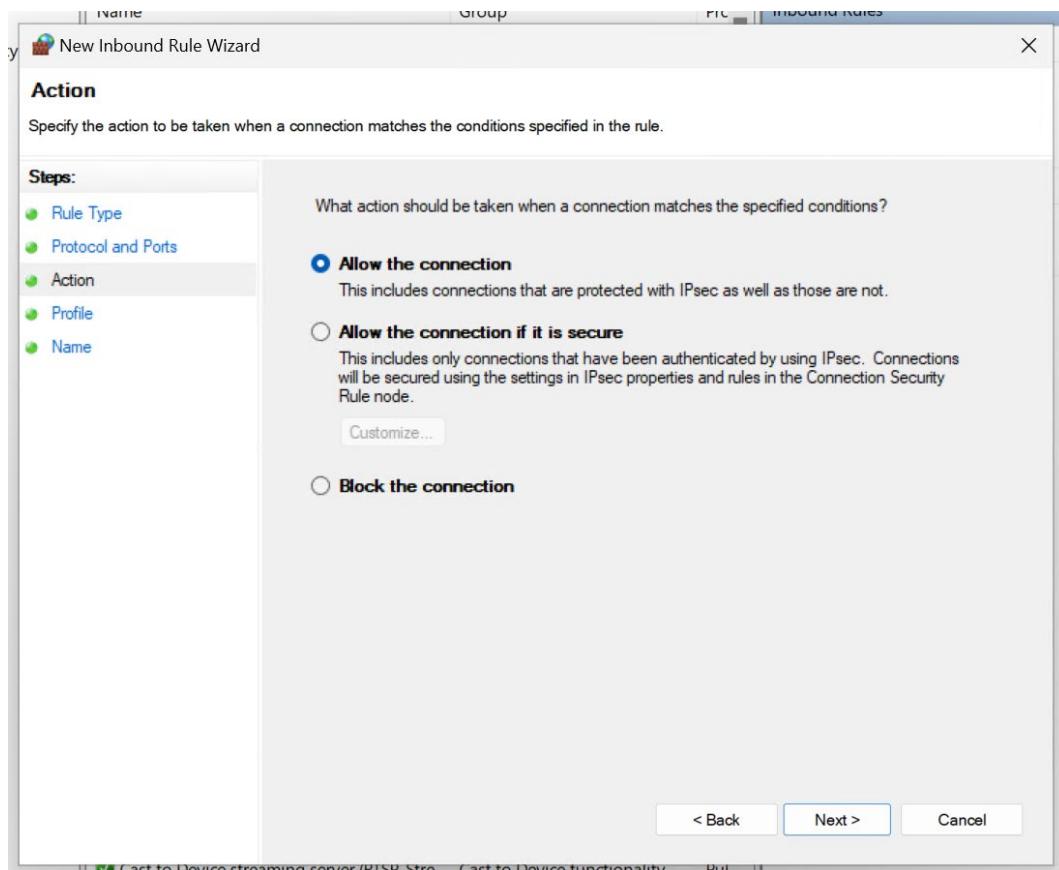
Select Specific local ports and enter the desired port number (Image 15), as set for the license server in the above steps. Click Next.

**Image 15** New Inbound Rule, Protocol and Ports



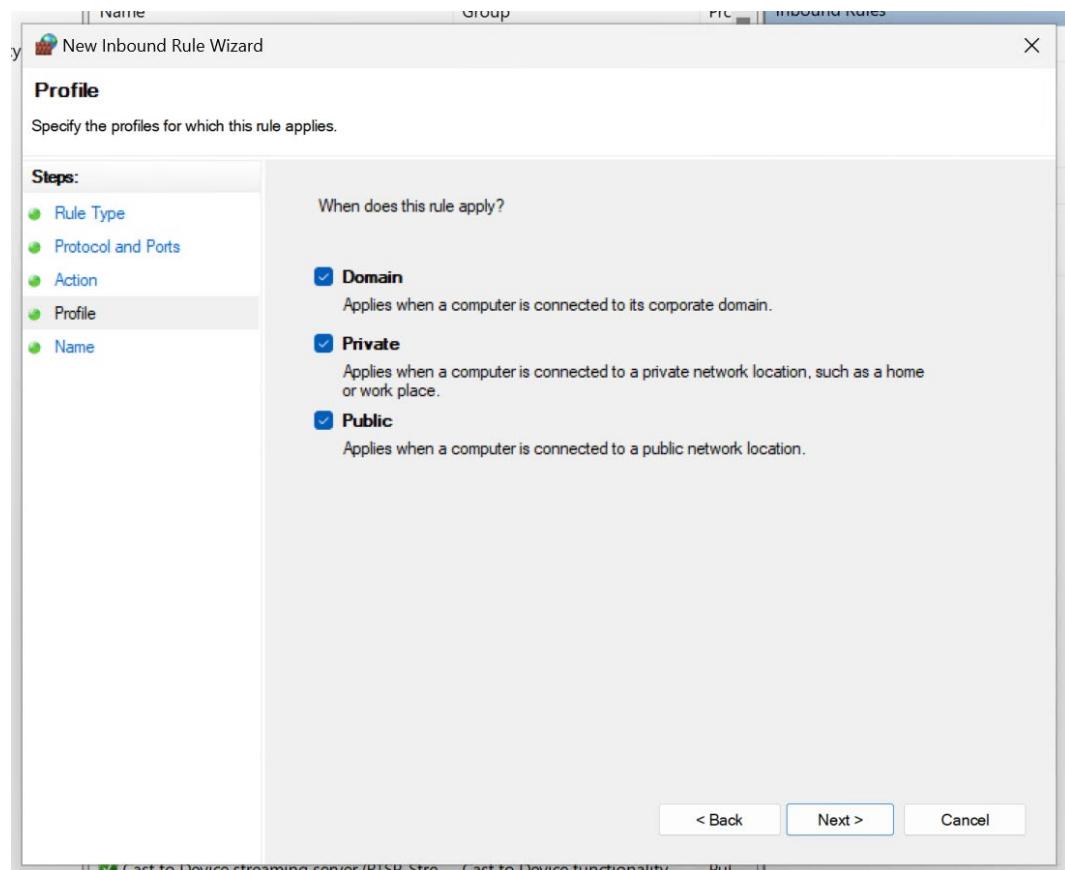
Select the appropriate action given your environment (Image 16). Click Next.

**Image 16** New Inbound Rule, Action



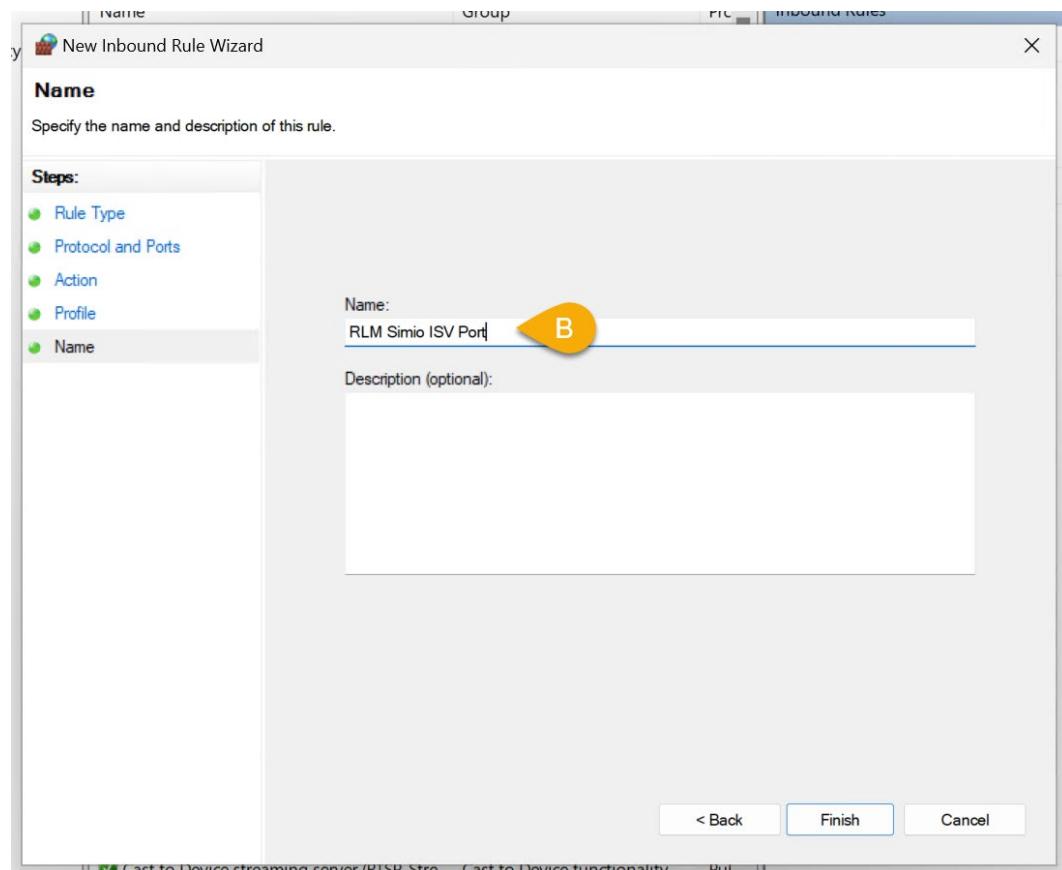
Select the appropriate network settings given your environment (Image 17). Select Next.

**Image 17** New Inbound Rule, Profile



Finally, provide a name for the new rule; recommended value: RLM Simio ISV Port (Image 18, Item B). Click Finish.

**Image 18** New Inbound Rule, Name



**Port 5053** If it is desirable to change the handshake port, it can be done by changing the license files found at C:\ProgramData\Simio LLC\Simio Network Licensing. This change needs to be done for all license files which contain the value being replaced (i.e., 5053) and the service will need to be restarted after the change are made. [See Miscellaneous + Troubleshooting > Restart the RLM Simio Service for more information.](#)

As shown below, is the contents of a license file. The value 5053 as shown in the first line will need to be replaced with the desired value.

```
HOST ADM-VM1 00155d561b09 5053
ISV simio
LICENSE simio simio-rps 2024.12 31-dec-2024 1 share=uhi
```

```
customer="Organization" issued=18-apr-2023  
_ck=cf6d0055c sig="60P0450WETGVD3A0QUAFZDWU28KK099HYVA822GD7BET  
SQ5B3JJQ09C9UBXR8B6SRY30DY0"
```

The client will need to be redirect to the new handshake port (see Image 30).

**Port 5054** If it is desirable to change the web administration app port, it must be done so by manually installing/registering the Windows Service.

Refer to the RLM License Administration manual, “The RLM Web Server” section, available from the web administration app (click RLM Manual... button from the left-side menu) for more information.

## ***Record Usage Statistics, Using Simio Options File***

The Diagnostic File (C:\Program Files (x86)\Simio LLC\Simio Network License Server\r1mdiag.txt) and Simio debugging log (C:\ProgramData\Simio LLC\Simio Network Licensing\simio.dlog) provide helpful information, like the usage of the licenses, but that is not their purpose.

For more robust collection of license usage information, the REPORTLOG and ROTATE commands should be added.

After the Options file is created, the following commands should be added.

```
REPORTLOG "+C:\ProgramData\Simio LLC\Simio Network  
Licensing\reportlog\SimioUsage.txt" detailed  
ROTATE daily
```

Where, the reportlog folder was created specially to house these files.

[See Troubleshooting + Miscellaneous > Simio Options File, simio.opt](#) for more information about the Simio Options file, like how to create and manage.

Refer to the RLM License Administration manual, “The ISV Options File” section, available from the web administration app (click RLM Manual... button from the left-side menu) for more information.

## **Distributing Licenses Across Multiple Servers** ★

If it desirable to use multiple servers, hosting different licenses or seats from the same license key on different machines, it is possible. Simply, install the Simio license server and licenses on each server, making sure to only claim the desired number of seats from a license key for the server (see Image 5, Item I). Multiple license keys are not required to distribute seats across servers.

A compelling benefit of multiple servers is the ability to manage the permissions and access to the servers differently, where it is not possible using Option file commands (see following sections).



**ATTENTION:** The combination of a license key, server (i.e., hostid), and seat count must be unique. For example, given a four-seat key, it is not possible to add two seats from the key to a server, then, later, add the other two seats to the same server.

## ***Specifying License Where Multiple Available, Command Line Option***

There are cases when there might be multiple license types on a single server. In such cases, each client might want to be configured to specify which license to use. This can be done using a command line Option. Specify the following command line option on the client machine from within the folder where Simio resides:

```
Simio -default-network-license:simio-?
```

Where `simio-?` is the license type. This command line option will write the license specified into the `Simio.Settings` file as `DefaultLicense=simio-?`. With this option specified in the `Simio.Settings` file, Simio will only try and get the specific license type from the network license server. If the license type is not available, Simio will not get a license. It will not try and retrieve another license type. Table 3 shows the codes for editions.

**Table 3** Simio Edition License Codes

Code	Edition
<code>simio-x</code>	Express (legacy)
<code>simio-d</code>	Design (legacy)
<code>simio-e</code>	Team (legacy)
<code>simio-n</code>	Enterprise (legacy)
<code>simio-pro</code>	Professional
<code>simio-rps</code>	RPS
<code>simio-q</code>	OptQuest for Simio
<code>simio-academic</code>	Academic
<code>simio-u</code>	Academic (legacy)
<code>simio-ue</code>	Academic (legacy)
<code>simio-ueu</code>	Academic (legacy)

## **Restricting License, Using Simio Options File**

RLM allows for different types of provisions for license availability to users, generally, (a) to provision certain editions to specific users, (b) to reserve licenses for specific users, and (c) to limit the number of licenses used by specific users. Each of these options requires naming users, individually or in groups. The following are commands that can be added to the Simio Options file.

After the Options file is created, the following commands can be added. [See Troubleshooting + Miscellaneous > Simio Options File, simio.opt](#) for more information about the Simio Options file, like how to create and manage.

**GROUP name list-of-usernames**

*Description:* defines a group of users after establishing the group name

**INCLUDE product user|host|group|host\_group|internet|internet\_group|project who [id=nnn]**

*Description:* allows usage of a product/edition by a particular user or group, those unnamed will not be allowed to use the specified product

**RESERVE num product user|host|group|host\_group|internet|internet\_group|project who [id=nnn]**

*Description:* reserves the number of licenses of the specified product for the specified user or group, and can only be used by the named

**MAX num product user|host|group|host\_group|internet|internet\_group|project who [id=nnn]**

*Description:* limits the number of licenses of the specified product for the specified user or group

The `_id=nnn` can be added to any license file for extra control of an the license server.

For example, an Options file that names some users in a group named GroupA and only allows a maximum of five Simio Professional seats to be used by the group might look as follows. See Table 3 for product codes.

```
GROUP GroupA user1_name user2_name
MAX 5 simio-pro GROUP GroupA
```

For example, an Options file that names some users in a group named GroupA and GroupB and reserves three Simio RPS seats for GroupA and two seats of Simio RPS for GroupB might look as follows.

```
GROUP GroupA user1_name user2_name user3_name
GROUP GroupB user4_name user5_name
RESERVE 3 simio-rps GROUP GroupA
RESERVE 2 simio-rps GROUP GroupB
```



**NOTE:** The functional difference between RESERVE and MAX is that RESERVE prevents unnamed users from accessing the specified license.

The Options file can be managed through the web administration app or with the server-local file. To realize a change to the Options file, click Reread/Restart Servers option from the left-side menu of the web administration app.

To understand how RLM captures usernames, review the license usage in the web administration app when licenses are in use (see Image 22 and Image 24). See Table 3 for product codes.

Refer to the RLM License Administration manual, “The ISV Options File” section, available from the web administration app (click RLM Manual... button from the left-side menu) for more information.

## ***Restrict Roaming, Using Simio Options File***

Using the Options file, the client license roaming behavior can be restricted.

After the Options file is created, the following commands can be added. [See Troubleshooting + Miscellaneous > Simio Options File, simio.opt](#) for more information about the Simio Options file, like how to create and manage.

**GROUP name list-of-usernames**

*Description:* defines a group of users after establishing the group name

**EXCLUDEALL\_ROAM user|host|group|host\_group|internet|internet\_group|project who**

*Description:* prevents roaming by specified users or group

**ROAM\_MAX\_COUNT num product [id=nnn]**

*Description:* limits number of licenses roamed for the specified product

**ROAM\_MAX\_DAYS num product [id=nnn]**

*Description:* limits the number of days a product can be roamed

The Options file can be managed through the web administration app or with the server-local file. To realize a change to the Options file, click Reread/Restart Servers option from the left-side menu of the web administration app.

To understand how RLM captures usernames, review the license usage in the web administration app when licenses are in use (see Image 22 and Image 24). See Table 3 for product codes.

Refer to the RLM License Administration manual, “The ISV Options File” section, available from the web administration app (click RLM Manual... button from the left-side menu) for more information.

## ***Proxy Server Environment Variables***

RLM activation supports proxy servers. To use a proxy server, there are 2 environment variables which must be set:

HTTP\_PROXY: Set to the hostname:port of the proxy server. For example, for proxy server on port 8080 on host proxy\_host:

```
% setenv HTTP_PROXY proxy_host:8080
```

If the proxy server uses authentication, set the HTTP\_PROXY\_CREDENTIALS environment variable to pass the credentials to the proxy server:

HTTP\_PROXY\_CREDENTIALS: The username and password to authenticate you to the proxy server, in the format user:password. For example, for username is "joe" and password "joes\_password":

```
% setenv HTTP_PROXY_CREDENTIALS joe:joes_password
```

## ***Custom RLM Web Administration App Users and Permissions***

Refer to the RLM License Administration manual sections “RLM privileges assignable in the RLM password file” and “Adding New Users” to create new users (available from the web administration app (click RLM Manual... button from the left-side menu)). Generally, the `rlm.pw` file is a text file with a `.pw` extension, where users are provisioned on unique lines in the following format.

username:encrypted password:permission set

To create a new user, with the username Bob, who has all permissions, the file contents would be as follow:

Bob::all

The password is left blank, and is set using the UI of the web administration app, by clicking the Change Password button from the left-side menu, after logging in where Username = ‘Bob’ and Password is left blank.

Refer to the Reprise documentation, mentioned above, for more details, like the different permissions available.

## Server Administration, Status Information

The web administration app (<http://localhost:5054/>) provides additional features and information. [See Special Installation and Configuration](#) for information about how to restrict certain users to licenses ([see Restricting License, Using Simio Options File](#)) and other possible customizations.

Described in this section are the meanings of the information presented in the web administration app, namely, from Status.

After successfully visiting the web-based application via a web browser and logging in, the homepage should be visible, see Image 19. If the page does not load, ensure the site is being visited via the machine on which the license server is installed or a machine that can access the server and port 5054. Otherwise, it is possible that the backend service (Windows Service RLM Simio) is not running, which will make the site inaccessible. If the service is stopped, try starting the service.

**Image 19** Homepage of Reprise License Server Administration Web-Based Application

The screenshot shows the 'Reprise License Server Administration' web interface. On the left, a sidebar lists various administration commands. Two specific items are highlighted with yellow arrows:

- A:** The 'Status' button in the sidebar.
- B:** The 'Diagnostics' section in the main content area, which contains a link to 'www.reprisesoftware.com'.

The main content area includes the following text and links:

- Reprise License Server Administration, v15.1**
- This web interface is an integral part of the *rlm* server.
- If *rlm* is started without any parameters, the web interface runs on port 5054. *rlm* can also be started with the *-nows* option to disable this web interface. *rlm* can be started with the *-ws port#* option to specify another port number.
- This tool allows you to perform status and administration functions on the RLM server.
- Note: If logins are disabled (see the left column under the Reprise logo), then the license file and options editing functions are not available.
- Choose a command from the list on the left-hand side of the window.
- Reprise Software, Inc.**  
3535 Factoria Blvd. SE #550  
Bellevue, WA 98006  
[www.reprisesoftware.com](http://www.reprisesoftware.com)  
[info@reprisesoftware.com](mailto:info@reprisesoftware.com)
- RLM contains software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>)  
Copyright (c) 1998-2008 The OpenSSL Project. All rights reserved.  
Copyright (c) 1995-1998 Eric Young ([easy@cryptsoft.com](mailto:easy@cryptsoft.com)) All rights reserved.
- Mongoose is an open source embedded HTTP/Websocket/MQTT library for C/C++ © Cesanta 2023  
<https://mongoose.ws>
-  Mongoose

As shown in Image 19, the Status of the license server can be attained by clicking the Status button in the left-side menu (Image 19, Item A). The Diagnostic file of the license server can also be generated from the homepage (Image 19, Item B). The Diagnostic file is often needed by Simio when discussing the license server, especially when troubleshooting.

After clicking the Status button, a page like that in Image 20 will be visible. On this page, the license files for the license server will be shown in Table 1 (Image 20, Item 1); if the instance of RLM is being used for multiple vendors, the files from all vendors using the instance are expected to be shown. In the next table (Image 20, Item 2), some statistics for the instance are shown.

**Image 20** Status Homepage

**Reprise License Server Administration**

Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.

Status for "rlm" on host (port 5053)

RLM software version	v15.0 (build:1)
RLM comm version	v1.2
debug log file	C:\ProgramData\Simio LLC\Simio Network Licensing\rlm.log
license files	C:\ProgramData\Simio LLC\Simio Network Licensing\activate1.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate2.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate3.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate4.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate5.lic C:\ProgramData\Simio LLC\Simio Network Licensing\activate6.lic

rlm Statistics	Since Start	Since Midnight	Recent
Start time	01/06 19:05:02	01/11 00:00:33	01/11 10:12:48
Messages	12 (0/sec)	0 (0/sec)	0 (0/sec)
Connections	12 (0/sec)	0 (0/sec)	0 (0/sec)

**ISV Servers**

Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN	ACTIVATE
simio	54102	Yes	0	simio	simio	simio	simio	simio	simio	simio	simio

**EDIT rlm Options**   **SHOW rlm Debug Log**

**Callout 1:** Points to the RLM software version table.

**Callout 2:** Points to the status summary table.

**Callout 3:** Points to the ISV Servers table. A green square highlights the 'Name' column for the first row, labeled '1'.

Table 3 (as shown in Image 20, Item 3) will have a row for each vendor using the instance of RLM. As shown in Table 3, simio is the only vendor on the instance (noted by the green square marked with the numeral 1). Additional vendors using the same instance are expected to show as additional rows in the same table.

In Image 20, Item C is a button that will navigate to the status of the license server as it relates to the Simio license server (i.e., license files associated with simio on the RLM instance). This page is shown in Image 21.

**Image 21** Server Status for Simio

The screenshot shows the 'Reprise License Server Administration' interface. On the left, a sidebar lists 'RLM Administration Commands' such as Shutdown, Reread/Restart Servers, and New Reportlog. The main area displays three tables: 1) 'ISV simio status on host (port 5053)' with vendor information like software version (v15.0), communication version (v1.2), and log files; 2) 'simio Statistics' showing metrics like start time, messages, connections, checkouts, denials, license removals, and current connections; 3) 'License pool status' listing various license entries with columns for Product, Pool, Ver, Expires, count, soft lim, inuse, res, timeout, share, checkouts, and Show Usage. A note at the bottom says 'Enter license password to select license results. Only licenses with matching passwords (or with no passwords) will be displayed above.' Below the tables are 'License Password:' input fields, 'Refresh' and 'BACK' buttons.

simio software version	v15.0 (build:1)
simio comm version	v1.2
debug log file	C:\ProgramData\Simio LLC\Simio Network Licensing\simio.log
report log file	n/a

simio Statistics	Since Start	Since Midnight	Recent
Start Time	01/06 19:05:03	01/11 00:00:33	01/11 11:44:19
Messages	356 (0/sec)	37 (0/sec)	4 (0/sec)
Connections	45 (0/sec)	11 (0/sec)	2 (0/sec)
Checkouts	6 (0/sec)	0 (0/sec)	0 (0/sec)
Denials	0 (0/sec)	0 (0/sec)	0 (0/sec)
License Removals	0 (0/sec)	0 (0/sec)	0 (0/sec)
Current Connections	0		

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	checkouts	Show Usage
simio-q	1	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-ps	2	2024.12	31-dec-2024	3	3	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-pro	3	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-d	4	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-e	5	2025.01	11-jun-2023	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-pro	6	2024.09	permanent	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>

Note: This page was accessed via the button marked C in Image 20.

The tables in Image 21, are as follows (1) general information regarding the vendor, (2) statistics for the Simio license server on the instance, and (3) the license present on the simio license server.

Table 3 of Image 21 shows the pool of licenses present for simio, where a pool of licenses has similar parameters (e.g., expiration date); a pool may be composed of multiple license files. Of interest, the table shows the Product (Simio Edition, e.g., 'simio-q' is Simio OptQuest, see Table 3 for product codes), Pool (sequential number identifier), Ver (the maximum version that can be used with the license), Expires (expiration date of license), count (number of seats in the pool), inuse (the number of seats currently used), and checkouts (the aggregate number of times the pool has been pinged during the current uptime period). Another column, roam, will appear when a license has been roamed; roamed licenses are considered "in use".

Note: When a license is roamed, the user opens an instance of Simio (considered a checkout), then navigates to the licensing UI to roam the licenses, which is considered a second checkout. Should the user return the license early, un-roaming the license is a third checkout.

Note: Simio recommends roaming a license only when necessary and for the least time necessary.

Using the button marked E in Image 21 will navigate to a page showing additional details of the respective pool usage, with user-identifying details (as shown in Image 22). The license pool status table is repeated on the page.

**Image 22** License Pool Usage Details for simio-q

The screenshot shows the 'Reprise License Server Administration' interface. On the left, there's a sidebar with 'RLM Administration Commands' and a list of options like Status, Shutdown, Reread/Restart Servers, etc. The main area has a blue header 'Reprise License Server Administration' and a sub-header 'Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.' Below this, a message says 'No Licenses in use for ISV simio for product simio-q, user [any], host [any]'. A yellow arrow labeled 'F' points to a table titled 'License pool status' which contains the following data:

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	checkouts	Show Usage
simio-q	1	2024.12	31-dec-2024	1	1	0	0	User&Host&ISV	0	0	usage...
simio-rps	2	2024.12	31-dec-2024	3	3	0	0	User&Host&ISV	0	0	usage...
simio-pro	3	2024.12	31-dec-2024	1	1	0	0	User&Host&ISV	0	0	usage...
simio-d	4	2024.12	31-dec-2024	1	1	0	0	User&Host&ISV	0	0	usage...
simio-e	5	2025.01	11-feb-2023	1	1	0	0	User&Host&ISV	0	0	usage...

At the bottom of the main area are 'Refresh' and 'Back' buttons.

Note: This page was accessed via the button marked E in Image 21.

As shown in Image 22 Item F, there are no licenses of type simio-q in use at the time the screen capture was taken. The information that will show in F is only that of the present time, historical data is not kept therein. [See Special Installation and Configuration > Record Usage Statistics, Using Simio Options File to capture historical usage information.](#)

Using the button marked D from Image 20, a similar page can be produced, as shown in Image 24; however, an additional interaction is required, as shown in Image 23 below.

**Image 23** Get License Usage, ISV Pre-Selected

Reprise License Server Administration  
Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.

Get License Usage

If the Product/User/Host fields are all blank, then all licenses in use will be displayed.  
Data entered in any of these fields will filter the list of licenses returned.  
Only licenses with matching passwords (or with no passwords) will be displayed.

ISV: simio

Product:

User:

Host:

License Password:

GET License Usage G

BACK

Choose a command from the list below

- Status
- Shutdown
- Reread/Restart Servers
- Switch Reporting
- New Reportlog
- Switch Debuglog
- Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

*Note: This page was accessed via the button marked D in Image 20.*

Selecting the button marked G in Image 23 without any changes will result in a detail page of pool usage (Image 24) without any filters, other than as indicated in the ISV field (i.e., when a value of simio, only licenses associated with simio will be shown). The resulting page is like that of Image 22, but Image 22 shows a page filtered by product = 'simio-q', and the resulting page from Image 23 with no changes will show all usage for all simio license pools (Image 24, Item H).

**Image 24** License Pool Usage for simio

The screenshot shows the 'Reprise License Server Administration' interface. On the left, a sidebar lists 'RLM Administration Commands' such as Status, Shutdown, Reread/Restart Servers, Switch Reportlog, New Reportlog, Switch Debuglog, Edit License Files, Activate License, Diagnostics, RLM Manual..., System Info, About..., Change Password, and Logout. The main area displays a table titled 'License pool status' with the following data:

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	checkouts	Show Usage
simio-q	1	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-rps	2	2024.12	31-dec-2024	3	3	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-pro	3	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-d	4	2024.12	31-dec-2024	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>
simio-e	5	2025.01	11-feb-2023	1	1	0	0	0	User&Host&ISV	0	<a href="#">usage...</a>

Buttons at the bottom include Refresh and Back.

Note: This page was accessed via the button marked G in Image 23.

Simio permits a user/session to use multiple instances of Simio without using an additional license seat. The information shown in Item F (Image 22) and Item H (Image 24) show the number of processes using a license; if a user is running multiple instances of Simio on their machine, it is expected that there will be a row to represent each instance using the license. Therefore, the number of records in the tables in Items F and H may be larger than the value in the inuse column for the respective pool (i.e., row).



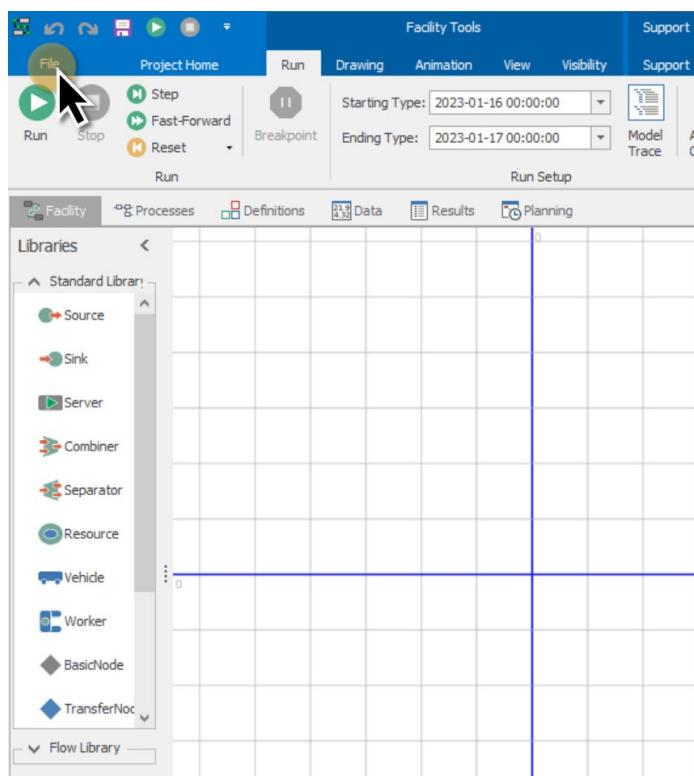
**ATTENTION:** Should a license seat become lost/inaccessible, e.g., the client machine crashes, the Remove button, which will show in each row of License status for ISV simio table (Item H, Image 24) may be used in attempt to free the license seat.

## Client Configuration

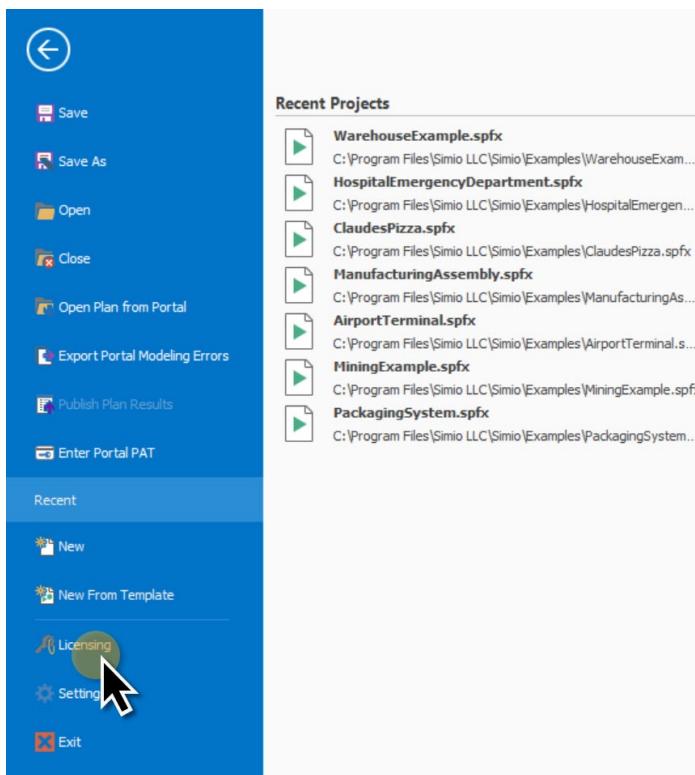
The client software (Simio) needs to be configured such that it points to the RLM license server. These steps are only for users of Reprise License Manager (“RLM”). To successfully connect to the license server, the license server must be running and have valid Simio licenses, where the version of the software being used by the client (e.g., XX.YYY.ZZZZ) is permitted by the license. The client will fail to connect to the license server if, for example, the user is running a version of Simio that is newer than their license permits.

Once the client software is installed, the connection to the RLM license server is initiated by going to File (upper-left corner) and then Licensing; see Image 25 and Image 26.

**Image 25** Simio Software

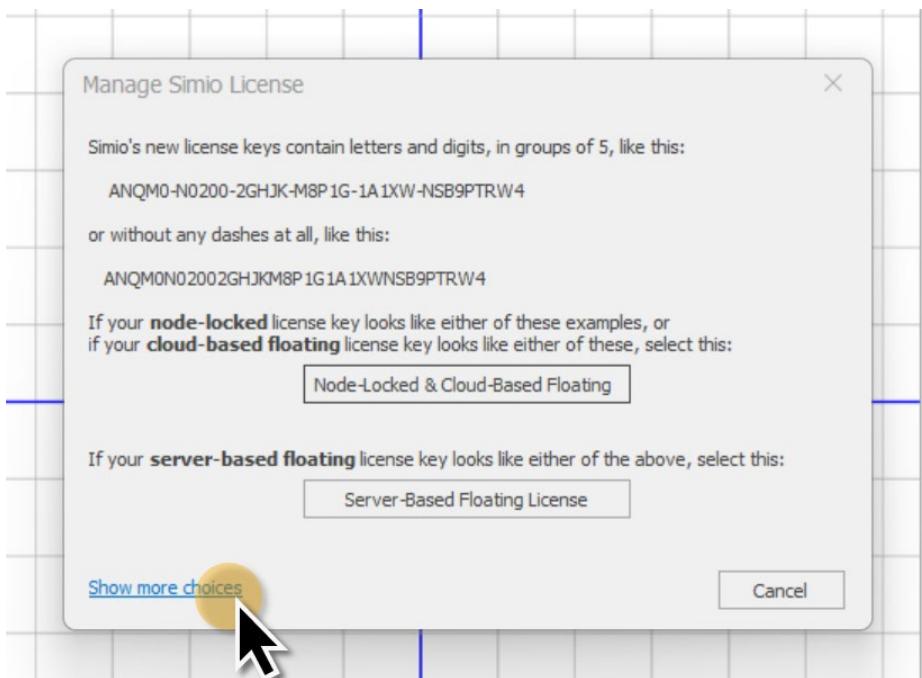


**Image 26** File > Selecting Licensing Menu Item

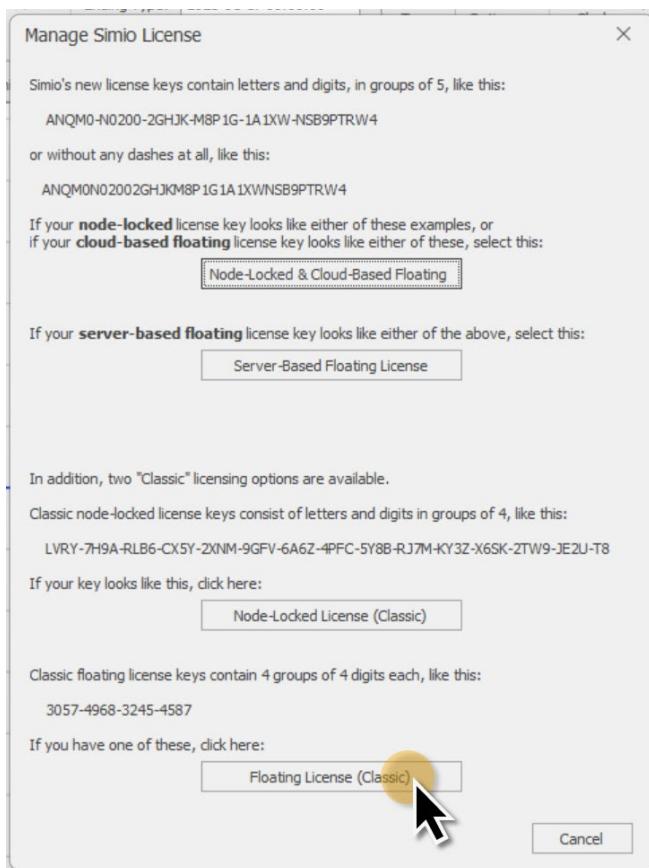


Once Licensing is selected, the Manager Simio License dialog like that shown in Image 27 or Image 28, below, is presented.

**Image 27** Manage Simio License Dialog, Condensed



**Image 28** Manage Simio License Dialog, Expanded

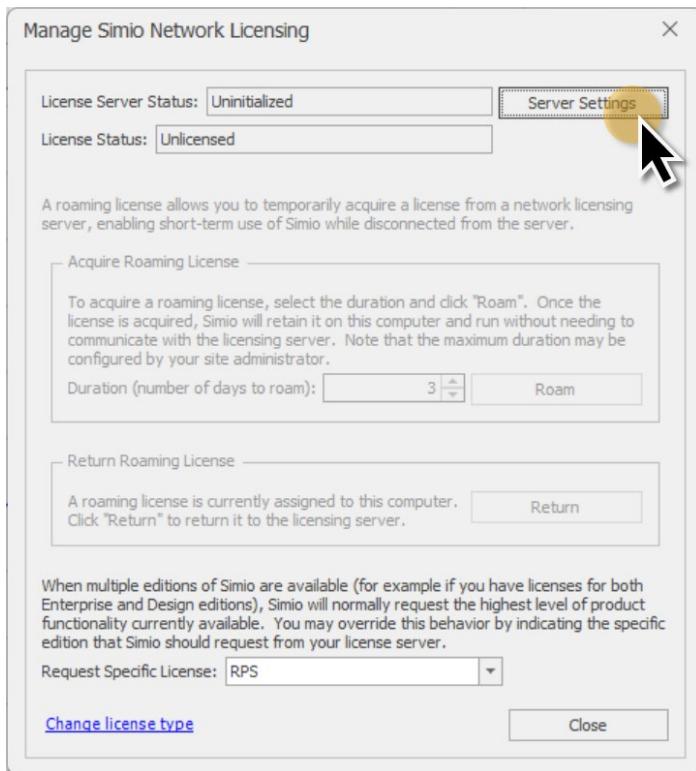


The correct selection for RLM is Floating License (Classic), which is shown in the expanded view of the dialog. Should the dialog look like that of Image 27, select the link on the lower-left corner, Show more choices.

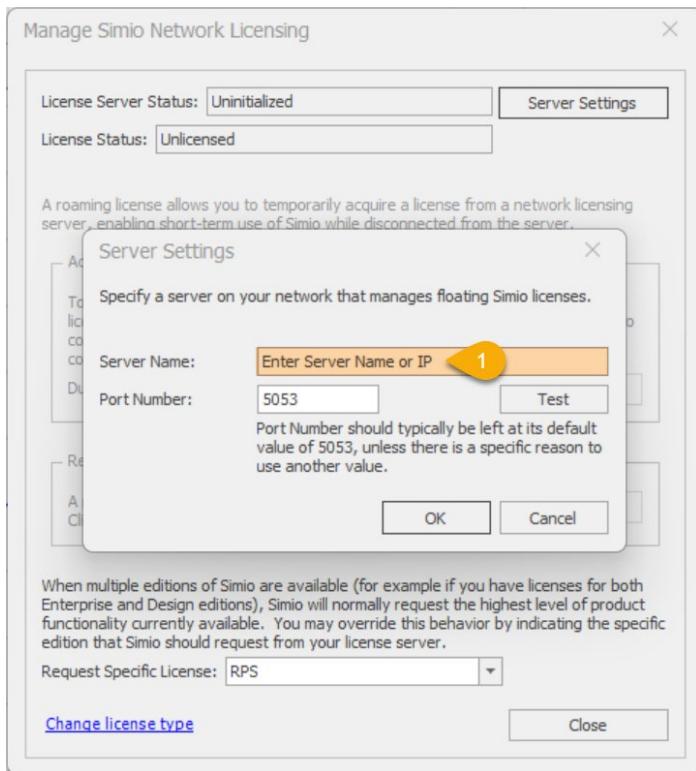
Note: If a dialog looks different than the Manager Simio License dialog shown in Image 27 and Image 28, use the Change license type button or link in the presented dialog so the appropriate selection is visible and can be selected.

Once Floating License (Classic) is selected, a dialog like that shown in Image 29 is presented.

**Image 29** Manage Simio Network Licensing, RLM



In the dialog, click the Server Settings button, another dialog will appear, see Image 30.

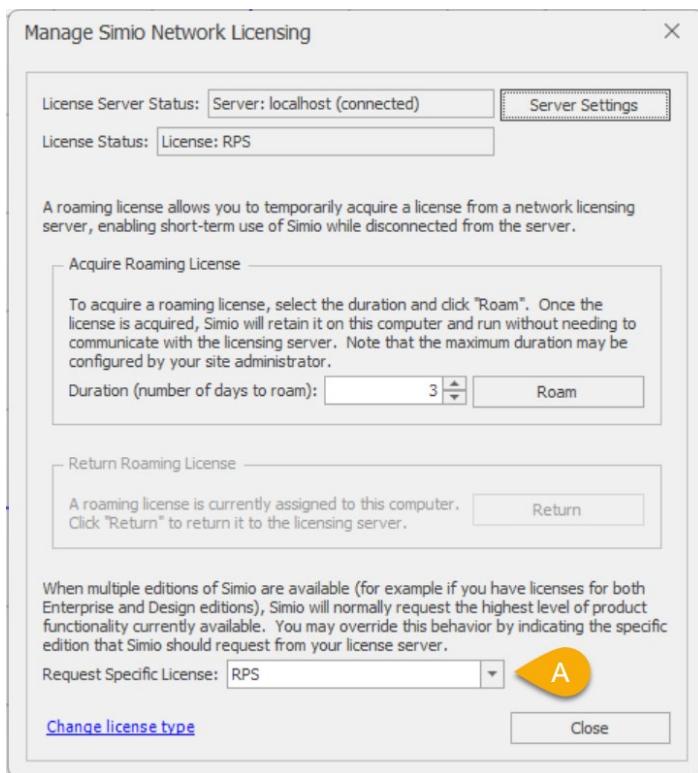
**Image 30** RLM Server Settings

The name or IP address of the license server should be entered in the field marked with numeral 1 in Image 30. The Port Number will likely be the provided value, 5053, unless the server is configured differently than the default ([See Special Installation and Configuration > Specifying Ports > Port 5053](#)).

The Test button ensures the machine on which the license server is installed can be reached from the client but is not indicative of successfully communicating with the license server (Simio license server).

After entering the Server Name value, select the OK button.

If the client can successfully communicate with the license server, the dialog will show as "connected" in the License Server Status field (see Image 31).

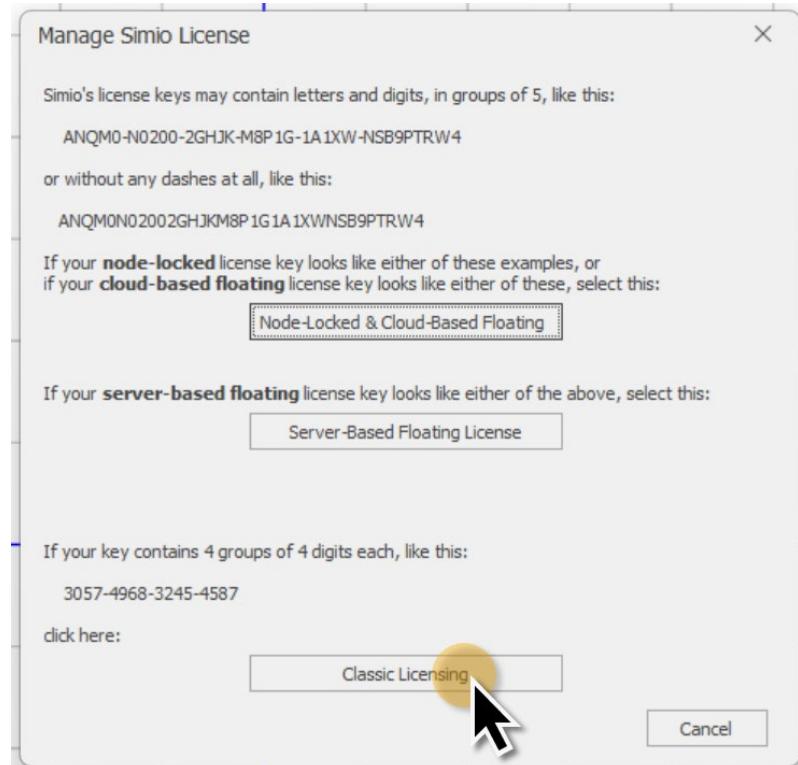
**Image 31** Successfully Connected Client to RLM License Server

If a license server has multiple editions, the user can select the edition they would like to use from the Request Specific License drop-down (Image 31, Item A); otherwise, Simio will select the most capable and available license.

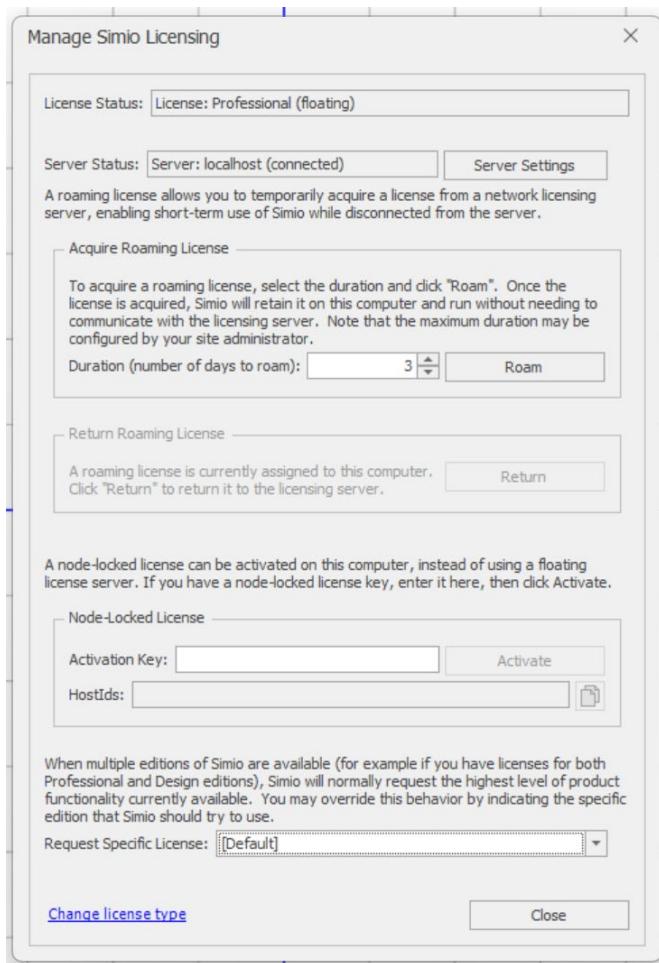
## Simio 15.254 Client Updates

In Simio 15.254, the client licensing dialogs have been updated as shown in Image 32 and Image 33, previously shown as Image 27 and Image 29, respectively.

**Image 32** Simio 15.254, Mange Simio License



**Image 33** Simio 14.254, Manage Simio Licensing, RLM



## Setting Up Multiple Clients

To distribute settings more easily to multiple clients, C:\ProgramData\Simio\Simio.Settings and C:\ProgramData\Simio\Server.lic can be distributed. First, configure one client; then, borrow the configuration (file contents) for other clients.

## Roaming

Roaming allows a license to be checked out from the server, which permits the user to access the license without an active connection to the server. Roaming should only be used when necessary and for the shortest duration required. A roamed license is unavailable for use by others, no matter if it is used by the user who roamed the license.



**IMPORTANT:** Simio cannot assist with returning roamed licenses. A roamed license should be returned before installing a new version of Simio and before a machine is refreshed or any other action that would preclude the user from accessing the user/machine which roamed the license.

## Miscellaneous + Troubleshooting

### Server Troubleshooting

#### *Virtual Server Machine*

If your license server machine is virtual, a special license may be required. Please send your request for the virtual machine license to [licensing@simio.com](mailto:licensing@simio.com), in reply to your initial license delivery email, stating that a virtualization license is required. Additionally, supply a Diagnostic file (see [Diagnostic File](#)).

### ***Simio-Assisted License Activation***

Simio can generate a license file on a user's behalf, which is especially helpful when the server operates in an isolated environment (i.e., no internet connection) and using another machine with an internet connection is burdensome. If requesting Simio to activate licenses, reply to the original license delivery email with the following information.

- Confirm the license keys and number of seats to activate
- A current Diagnostic file from the license server (see [Diagnostic File](#) for more information)

After the license files are returned, place the license files in C:\ProgramData\Simio LLC\Simio Network Licensing (for default installations). Then, use the Reread/Restart Servers command from the left-side menu of the web administration app, and REREAD/RESTART. If the license file(s) set the value for the ISV port, the RLM Simio Windows Service needs to be restarted (see [Restart the RLM Simio Service](#)).

## ***Diagnostic File***

A Diagnostic file is an important troubleshooting tool. Whenever asking for assistance with a license server, readily supply the latest Diagnostic file. To create a Diagnostic file, use the Diagnostic button from the left-side menu of web administration app. Then, follow the prompts, making sure to acknowledge the location to which the file is written (usually C:\Program Files (x86)\Simio LLC\Simio Network License Server).

***Find Hostid in Diagnostic File*** The hostids of the server can be found in the Diagnostic file in the RLM hostid list section of the file. These values are fingerprints which uniquely identify the machine. The same values can be found from the web administration app, using the System Info button from the left-side menu.



**IMPORTANT:** While unlikely, the values of a machine hostids can change if hardware or (substantial) features of the machine are changed. Be sensitive to changes made to the server machine; should service become disrupted, review changes made to the machine.

## ***Restart the RLM Simio Service***

Go to Windows Services (press Windows key and search for “services”, then select Services). Find RLM Simio and restart the service (right-click on RLM Simio and select Restart). If unsuccessful or the desired change which inspired the restart was not realized, it may be necessary to first Stop then Start the service.



**IMPORTANT:** It is not recommended to restart the server machine while licenses are in use, which may cause licenses to become inaccessible. Restarting/stopping the service should only be done when necessary.

## Ports

The license server uses three TCP/IP ports, see Table 4. If the ports required by the license server are unattainable, the license server will likely fail to operate. If the Windows Service RLM Simio is not running or the web administration app cannot be accessed, the license server is not running. A likely reason for this behavior is the inability for the license server to attain the handshake or web administration app ports (5053 and 5054 respectively).

Often when there are multiple instances of RLM on a machine, only one will run because of the competition for the same ports.

A tool to investigate port usage is Command Prompt and the netstat -anob command, with elevated permissions. In conjunction with the results, Task Manager can be helpful in identifying what Processes are responsible for the port usage.

If the non-standard ports for the RLM license server cannot be used, they can be changed, [see Special Installation and Configuration > Specifying Ports for more information](#).

**Table 4** License Server Ports

TCP/IP Port	Description
5053	The handshake port to establish a connection to the license server
5054	The port on which the web administration app runs
Dynamic ISV Port	The ISV-specific port that rotates every 24 hours when it is not set to a static value

When an environment has a firewall, often, rules need to be created to allow traffic over ports 5053 and the ISV Port, which should be set to a static value. [See Special Installation and Configuration > Specifying Ports for more information](#).

### ***simio.set File***

The `simio.set` file is required, and is provided with the Simio-provided installer for the license server. If an RLM license server not provided by Simio LLC is being used, the file can be attained by running the Simio-provided installer and harvesting the file from `C:\Program Files (x86)\Simio LLC\Simio Network License Server`. The file will need to be placed in the same directory as the RLM executable which is being used.

A license server running the RLM service which was not provided by Simio will be unsuccessful without the `simio.set` file.



**IMPORTANT:** Simio LLC can only provide limited guidance when using a license server provided by another vendor.

## ***Simio Options File, simio.opt***

The Options file can be managed through the web administration app or with the server-local file. To realize a change to the Options file, click Reread/Restart Servers option from the left-side menu of the web administration app.



**NOTE:** There are wide variety of implementations of the Options file, getting the right configuration for your organization may require some trial and error or experimentation. Simio LLC can only provide limited guidance for configuring a Options file.

To create the Options file (simio.opt), click on Status (Image 34, Item A) once logged into the web administration app. Then, click on simio under the OPTIONS column in the ISV Servers table (Item B).

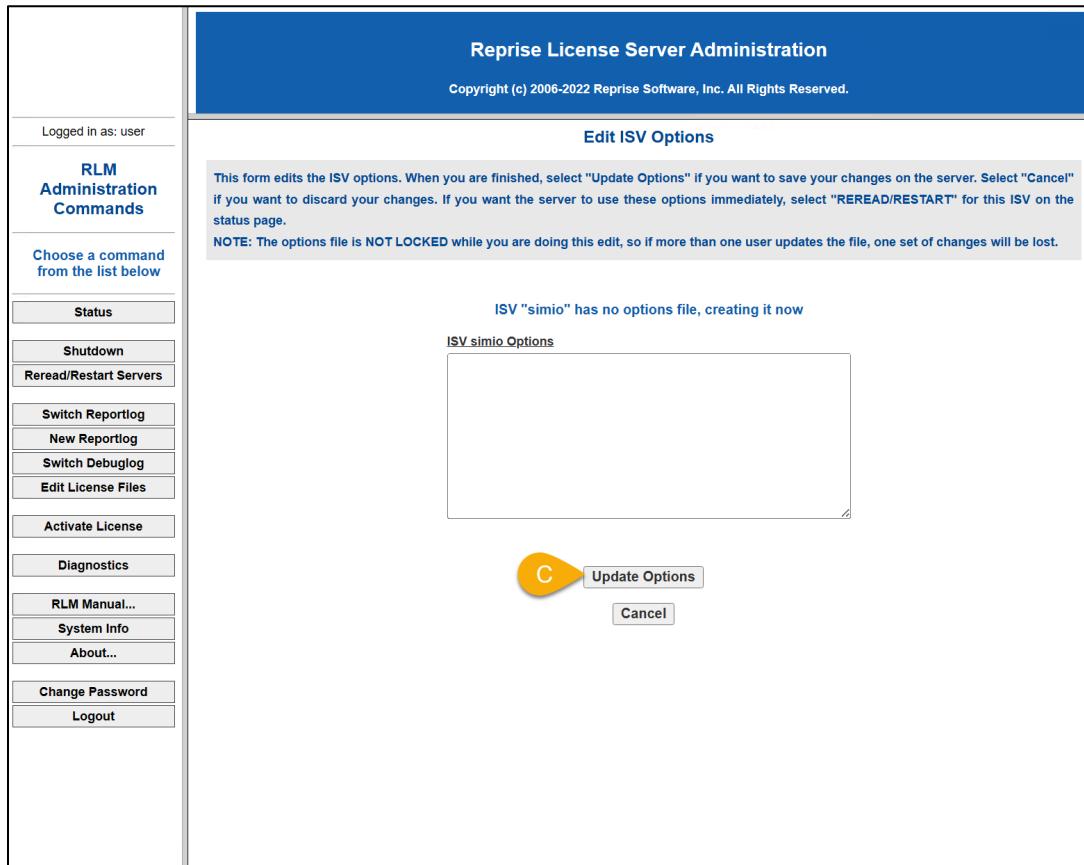
**Image 34 Web Administration App, Status**

The screenshot shows the 'Reprise License Server Administration' interface. The left sidebar contains a navigation menu with various options like 'Status', 'Shutdown', 'Reread/Restart Servers', etc. A yellow circle labeled 'A' points to the 'Status' link. The main content area displays the 'Status for "rlm" on ADM-VM1 (port 5053)' page. It includes a table of software and log file paths, a 'rim Statistics' table showing start time, messages, and connections, and two buttons: 'EDIT rlm Options' and 'SHOW rlm Debug Log'. Below this is an 'ISV Servers' table with a single row for 'simio'. A yellow circle labeled 'B' points to the 'simio' entry in the 'OPTIONS' column of the ISV Servers table.

ISV Servers											
Name	port	Running	Restarts	Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN	ACTIVATE
simio	51102	Yes	0	simio	simio	simio	simio	simio	simio	simio	simio

Then, by clicking Update Options (Image 35, Item C) an Options file will be created:  
C:\ProgramData\Simio LLC\Simio Network Licensing\simio.opt.

**Image 35** Web Administration App, Update Options



As shown in Image 36, the Options file was creation/update is confirmed.

**Image 36** Options Update Confirmation

The screenshot shows the 'Reprise License Server Administration' interface. The top navigation bar is blue with the title 'Reprise License Server Administration' and the copyright notice 'Copyright (c) 2006-2022 Reprise Software, Inc. All Rights Reserved.' On the left, there is a vertical sidebar menu titled 'RLM Administration Commands'. The menu items are listed in a grid:

- Logged in as: user
- RLM Administration Commands**
- Choose a command from the list below
- Status
- Shutdown
- Reread/Restart Servers
- Switch Reportlog
- New Reportlog
- Switch Debuglog
- Edit License Files
- Activate License
- Diagnostics
- RLM Manual...
- System Info
- About...
- Change Password
- Logout

The main content area has a white background. It displays the message 'simio options file written.' and a 'Back to Status' button.

## Client Troubleshooting

If the client fails to connect to the license server, check the following:

- RLM Simio Service is running on the server machine
- The client version of the software is supported by the available licenses
- There is an available seat for the client to use (i.e., all licenses are not in use)
- In an environment with firewalls, the ISV ("simio") port is set to a static number, and the port has been opened (see [Setting Dynamic ISV-Specific Port Static](#) and [New Firewall Inbound Rule](#) for more information.)

For assistance with licensing, email [licensing@simio.com](mailto:licensing@simio.com) with all details, including license keys and the most-recent Diagnostic file.

## Get Help

For assistance, please email [licensing@simio.com](mailto:licensing@simio.com) with any relevant details, including license keys, a current Diagnostic file, observed behavior, and appropriate screen captures.

## Revisions and Changes

Date	Description
20 July 2023 / Simio 15.254	Updated client dialogs
July 2023	<p>RLM updated from v9.4/11.2 to v15.1</p> <ul style="list-style-type: none"> <li>- Requires named users with passwords</li> <li>- Simio Network License Server Configuration utility removed, must use web administration app</li> <li>- The Service is run under the Network Service account</li> <li>- simio-ud replaced by simio-academic</li> </ul>
### end ###	

## Accuracy Statement

Multiple parties have reviewed the information presented herein for clarity and accuracy; however, Simio LLC cannot guarantee that this document is error-free. Should you find errors or inadequate detail, or this document is otherwise insufficient, please notify us by emailing [licensing@simio.com](mailto:licensing@simio.com) with the name of this document, the documentation versioning information found in the lower-left corner of each page, the location of interest, and your observations of inaccuracy or improvement.